



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,286	12/06/2001	Yoshiaki Hanyu	216828US	5073

22850 7590 02/09/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

FRANCIS, MARK P

ART UNIT PAPER NUMBER

2193

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/003,286	Applicant(s) HANYU, YOSHIAKI	
	Examiner Mark P. Francis	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/05/02;12/06/01</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2193

DETAILED ACTION

1. This action is responsive to the application filed on December 06, 2001.
2. Claims 1-45 have been examined.

Oath/Declaration

3. The Office acknowledges receipt of a properly signed oath/declaration filed January 31,2001.

Foreign Priority

4. The Office acknowledges the application's foreign priority of December 07, 2000.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8,10-19, 21-30, 32-33,and3 6-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunnell (U.S. Pat 5,594,903) in view of Ozawa. (U.S. Pat 6,343,379)

Independent claims

Regarding claims 1,12,23,36,41,

Art Unit: 2193

Bunnell discloses an apparatus for downloading a program for download from a host computer,(Col 2:65-67, "...provide an operating system architecture...", Col 3:1-22, "...directly or down-loadable...", Col 13:40-50, "...the download files...", Col 14:21-34, "...system kernel is to be downloaded...", Col 16:44-60, "...kernel image is to be downloaded...") said apparatus being connected to said host computer via a network,(Col 5:30-44, "...a network interface...", e.g. See Fig.1, element 28 and related text) said apparatus comprising:

a first recording section that is writable and rewritable with the program for download; (Col 7:41-67, "...The address portion 60 includes a nonvolatile portion...EEPROM and Flash EPROM...")

a second recording section,(e.g. See Fig. 3, elements 62 and 64 and related text) provided in a predetermined area of said first recording section,(Col 5:64-67, "...A portion of the addressable memory space within the main memory array...") which already stores at least a program for executing reception of the program for download(Col 5:45-67, "...In general, the remaining physical RAM memory is allocated...Transient programs, often generically referred to as application programs...", Col 3:5-22, "...a second portion for dynamic allocation and recovery by the operating system...")

and a program for executing writing of the program for download onto said first recording section; (Col 7:40-67, "...provides for active execution of the operating system and selected application program code...") but does not disclose a receiving unit which

Art Unit: 2193

receives the program for download according to the program for executing reception that has been stored in said second recording section;
and a writing unit which writes the received program for download onto said first recording section according to the program for executing writing that has been stored in said second recording section,
wherein rewriting of the programs stored in said second recording section is inhibited.

Ozawa discloses a receiving unit which receives the program for download according to the program for executing reception that has been stored in said second recording section;(Col 2:28-46, "...The receiver also includes...", Col 6:38-54, "...receiver is divided into body program...")

and a writing unit which writes the received program for download onto said first recording section according to the program for executing writing that has been stored in said second recording section,(Col 2:28-46, "...and replace in the first storage means...", Col 7:5-20, "...The control program is written into the first storage means...")
wherein rewriting of the programs stored in said second recording section is inhibited
Col 2:28-46, "...and replace in the first storage means...", Col 6:55-67, "...could be written in an erasable, non-volatile memory device...",Col 7:5-20, "...The control program is written into the first storage means...") in an analogous system for the purpose of providing a system and method for updating a receiver's control program having a simple structure and means for preventing the loss of functions due to a power outage during such updating as disclosed by Ozawa.(Col 2:23-27)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include receiving and writing units for the downloaded program, using the teachings of Bunnell.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to provide a system and method for updating a receiver's control program having a simple structure and means for preventing the loss of functions due to a power outage during such updating.(Ozawa: Col 2:23-27)

Dependent claims

Regarding claims 2,13,24,37,and 42, the rejection of claims 1,12,23,36,and 41 are incorporated respectively and further, Ozawa discloses that second recording section further stores a program for executing erasing of contents of said first recording section,(Col 1:29-40, "...the old control program first must be erased...") said apparatus further comprises an erasing unit which erases the program for download stored in said first recording section according to the program for executing erasing that has been stored in said second recording section,(Col 2:1-20, "...to erase the old control program in flash memory...") and wherein said writing unit writes the received program for download onto said first recording section from which the existing program has been erased by said erasing unit, according to the program for executing erasing. (Col 2:1-20, "...to write a new control program...")

Regarding claims 3,14,25,38,and 43, the rejection of claims 1,12,23,36, and 41 are incorporated respectively and further, Ozawa discloses comprising a download result storage unit,(Col 5:40-67, "...determines whether all of the data ...are downloaded...") which stores a status of the writing of the program for download carried out by said writing unit. (Col 6:38-67, "...store the body flag, loader flag, and immediately-after-loader-change flag...")

Regarding claims 4,15, and 26, the rejection of claims 3,14 and 25 are incorporated respectively and further, Ozawa discloses that said download result storage unit stores, as the status of the writing, information regarding whether or not the program for download has been written onto said first recording section to the end. (Col 6:18-37, "...the body flag stored in flash memory is set to "invalid"...")

Regarding claims 5,16, and 27, the rejection of claims 4,15 and 26 are incorporated respectively and further, Ozawa discloses that said receiving unit receives the program for download again from said host computer according to the program for executing the reception if information that said writing unit has not written the program for download to the end onto said first recording section has been stored in said download result storage unit. (Col 6:1-47, "...is reexecuted to correctly download...")

Regarding claims 6,17,28,39 and 44, the rejection of claims 1,12,23, 36 and 41 are

Art Unit: 2193

incorporated respectively and further, Ozawa discloses further comprising a download result storage unit, which stores information regarding a status of the receiving of the program for download by said receiving unit. (Col 6:15-55, "...the loader flag...")

Regarding claims 7,18 and 29, the rejection of claims 6,17 and 28 are incorporated respectively and further, Ozawa discloses that said download result storage unit stores information regarding up to which part of the program for download said receiving unit has received. (Col 5:50-67, "...determines whether all of the data...are downloaded...")

Regarding claims 8,19,30,40 and 45, the rejection of claims 6,17,28,39 and 44 are incorporated respectively and further, Ozawa discloses that if information that said receiving unit has received a part of the program for download already has been stored in said download result storage unit, then said receiving unit receives the rest of the portion of the program for download according to the program for executing the reception. (Col 4:40-67, "...that the version of the loader program currently written in flash memory is not the latest version...")

Regarding claims 10,21, and 32, the rejection of claims 1,12 and 23 are incorporated respectively and further, Bunnell discloses that said first recording section is a flash EEPROM. (Col 7:40-67, "...EEPROM and Flash...")

Regarding claims 11,22, and 33, the rejection of claims 10,21 and 32 are incorporated

Art Unit: 2193

respectively and further, Bunnell discloses that said first recording section is realized by a boot area of said flash EEPROM (Col 7:40-67, "...EEPROM and Flash...") and said second recording section is realized by an area excluding said boot area of said flash EEPROM. (Col 7:40-67, "...A portion of the addressable memory space...", e.g. See Fig. 2 Boot Loader and related text)

7. Claims 9,20,31,34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunnell (U.S. Pat 5,594,903) in view of Ozawa (U.S. Pat 6,343,379) and further in view of Kalwitz (U.S. Pat 5,815,722)

Regarding claims 9,20, and 31,

The rejection of claim 6 is incorporated and further,

Neither Bunnell nor Ozawa disclose,

the download result storage unit stores information regarding up to what number of frames of the program for download said receiving unit has received.

Kalwitz discloses the download result storage unit stores information regarding up to what number of frames of the program for download said receiving unit has received(Col 31:13-27, "...the frame packet type...", Col 37:30-50, TABLE 6...Total number of frames received...") in an analogous system for the purpose of providing hardware and software solutions for making a network peripheral, such as a printer, an

Art Unit: 2193

interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as detailed status information. (Kalwitz: Col 3:65-67 and Col 4:1-10)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to store information concerning the number of frames of the downloaded program that have been received using the teachings of Kalwitz.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to providing hardware and software solutions for making a network peripheral, such as a printer, an interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as detailed status information. (Kalwitz: Col 3:65-67 and Col 4:1-10)

Regarding claim 34,

The rejection of claim 23 is incorporated and further,

Neither Bunnell nor Ozawa disclose,

that the image formation apparatus is a printer.

Art Unit: 2193

Kalwitz discloses that the image formation apparatus is a printer(Col 4:20-30, "...and a printer 16...") in an analogous system for the purpose of providing hardware and software solutions for making a network peripheral, such as a printer, an interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as detailed status information.(Kalwitz: Col 3:65-67 and Col 4:1-10)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include a printer using the teachings of Kalwitz.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to providing hardware and software solutions for making a network peripheral, such as a printer, an interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as detailed status information. (Kalwitz: Col 3:65-67 and Col 4:1-10)

Regarding claim 35,

The rejection of claim 23 is incorporated and further,

Neither Bunnell nor Ozawa disclose,

Art Unit: 2193

that the image formation apparatus is a copier.

Kalwitz discloses that the image formation apparatus is a Copier(Col 5:39-50, "...copiers...") in an analogous system for the purpose of providing hardware and software solutions for making a network peripheral, such as a printer, an interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as detailed status information.(Kalwitz: Col 3:65-67 and Col 4:1-10)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include a copier using the teachings of Kalwitz.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to providing hardware and software solutions for making a network peripheral, such as a printer, an interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as detailed status information. (Kalwitz: Col 3:65-67 and Col 4:1-10)

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2193

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark P. Francis whose telephone number is (571) 272-7956. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark P. Francis
Patent Examiner
Art Unit 2193


KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 10/003,286

Art Unit: 2193

Page 13